



THE UNIVERSITY OF  
WESTERN AUSTRALIA



plant energy biology  
ARC CENTRE OF EXCELLENCE

## POST-DOCTORAL RESEARCH FELLOW IN SINGLE CELL COMPUTATIONAL GENOMICS

### Epigenetics and Genomics Laboratory (Lister Lab)

ARC Centre of Excellence in Plant Energy Biology

The University of Western Australia

- 3 year appointment
- Salary: Level A (\$91,397 p.a.) or Level B (\$96,210 - \$114,250 p.a.)
- [Job Reference # 498505](#)

A post-doctoral position is available for a computational biologist to undertake research in the area of plant single cell genomics. The research will involve the analysis of large-scale transcriptomic and epigenomic datasets to investigate plant cell identity and dynamics, with a particular focus on sequencing-based single cell resolution analyses. Candidates with a background in computational biology/mathematics/statistics and experience in cell biology and advanced high-throughput genomics are encouraged to apply.

The Epigenetics and Genomics Laboratory ([Lister Lab](#)), at the University of Western Australia, is comprised of molecular, cellular and computational biologists, forming a multi-disciplinary group undertaking a diverse range of (epi)genomics research. We utilize genomic, computational, genetic, molecular, and biochemical approaches to investigate the regulation of genomic information in animal and plant systems. For some examples of our work in these areas see the following publications in *Science* (2013), *Nature Genetics* (2016), and *eLife* (2016). The lab is also a member of the ARC Centre of Excellence in Plant Energy Biology (PEB), a nationally funded research centre headquartered at UWA, and a leading plant molecular research centre and focal point of plant sciences in Australia.

Candidates should have a PhD in a relevant discipline (Bioinformatics, Computer Science, Molecular Biology, etc). Good programming skills in at least one language (e.g. R, Perl, C++, Java) is essential. Previous experience in analysis of next generation sequencing data and statistical modeling of high-dimensional data is highly desirable. Expertise in regulatory genomics and transcriptomics is very important, and genome scale integrative analysis of experimental datasets is highly desirable (e.g. RNA-seq, ChIP-seq, DNA methylation, chromatin accessibility, sequence analysis). An understanding of the experimental techniques underlying such genomics experiments is advantageous.

**For further information contact Ryan Lister** ([ryan.lister@uwa.edu.au](mailto:ryan.lister@uwa.edu.au))

**Closing date:** Monday March 27, 2017

**Applications must be submitted online.** Full details of the responsibilities and selection criteria are outlined in the position description. Applicants should demonstrate they meet the selection criteria, and should include a cover letter and a description of their research interests and career goals.